

Compost Facility Operations Plan



Peninsula Compost Company, LLC
612 Christiana Avenue
Wilmington, DE 19801

July 2014

Prepared By:
Compliance Plus Services, Inc.
P.O. Box 186
Hatboro, PA 19040-0186
215-734- 1414 or 1-866-976-PLUS

Table of Contents

1.0	FACILITY OVERVIEW	1
1.1	Purpose and Regulatory Overview	1
1.2	General Description	1
1.2.1	Property Owner	2
1.2.2	Lease Agreement	2
1.2.3	Former Site Remediation and Engineering Controls	2
1.3	Facility Service and Marketplace Overview	3
1.3.1	Recyclable Food Waste Materials	3
1.3.2	Yard Waste, Wood Products, Tree Parts and Brush	4
1.3.3	Hatchery Waste	5
1.3.4	Clean Fill/Soils	5
1.4	End Market Use	5
2.0	SITE ENVIRONMENTAL SETTING	6
2.1	Site Location	6
2.2	Surrounding Land Use and Topography	6
2.3	Water Resources	6
2.3.1	Onsite Water Supplies	6
2.3.2	Surface Water Bodies	6
2.3.3	Groundwater	7
	2.3.3.1 Regional Public Water Wells and Intakes	7
	2.3.3.2 Private Potable Water Wells	7
2.4	Surface Drainage and Stormwater	7
2.4.1	Designated Flood Plain Areas	7
2.4.2	On-Site Drainage Controls	7
2.4.3	Stormwater Retention Basins	8
2.5	Wetlands	8
2.6	Nuisance Dusts, Odors and Vector Controls	8
2.6.1	Dust Management Plan	8
2.6.2	Odor Controls	8

2.6.3	Vector Attraction Reduction	9
2.6.4	Litter Control	9
2.7	State and Local Permits	10
3.0	FACILITY DESCRIPTION AND ENVIRONMENTAL MANAGEMENT CONTROLS	10
3.1	Facility Layout and Design	10
3.2	Site Access and Traffic Management	13
3.2.1	Operating Hours	13
3.2.2	Site Security	13
3.2.3	Area Roadway and Truck Routing	14
3.2.4	Internal Traffic Management and Procedures	14
	3.2.4.1 Signs	14
	3.2.4.2 Directional Routing	14
	3.2.4.3 Dispatch/Internal Communications	15
3.3	Process Areas and Controls	15
3.3.1	Tipping/Receiving Building (Wood Grinding Equipment)	15
3.3.2	Storage Areas and Capabilities (Food/Wood Compost Feed Stock, Compost Storage Areas, Soil Storage Area, Residual Storage)	16
	3.3.2.1 Pre-compost Staging Area	16
	3.3.2.2 Windrow Processing Area	16
	3.3.2.3 Manufactured Soil	18
	3.3.2.4 Material Storage	18
	3.3.2.5 Residual Storage	21
3.3.3	Biofilter Unit Design and Operating Procedures - Air System Management System	22
3.3.4	Gore System Equipment (Windrow Covers, Monitoring Systems) ..	24
3.3.5	Screening Area and Equipment	24
3.3.6	Other Facility Process/Management Equipment	25
4.0	PROCEDURES FOR APPROVAL/ACCEPTANCE OF COMPOST FEED MATERIALS	25
4.1	Food Scraps and Byproducts	25

4.2	Yard Waste, Wood Products, Tree Parts & Brush	26
4.2.1	Sources	26
4.2.2	Evaluation/Inspection Procedures (may include lab analysis)	27
4.3	Hatchery Waste	28
4.3.1	Sources	28
4.3.2	Inspection	28
4.4	Soil/Clean Fill	29
4.4.1	Sources	29
4.4.2	Pre-Approval - Testing and/or Due Diligence Review	29
4.5	Rejection Procedures	29
5.0	COMPOST FACILITY PROCESSING AND TREATMENT PROCEDURES ..	30
5.1	Material Acceptance Procedures	30
5.1.1	Scheduling	30
5.1.2	Receipt/Log-In	30
5.1.3	Unloading	31
5.1.4	Inspection	31
5.1.5	Material Acceptance/Rejection	31
5.1.6	Vehicle Log Out Procedures	32
5.2	Shredding/Blending Process	32
5.2.1	Blending Rates/Process Control	32
5.2.2	Equipment and Material Handling Details	33
5.2.3	Quality Control	33
5.3	High Rate Composting - (Phase 1)	33
5.4	Stabilization (Phase 2)	34
5.5	Curing (Phase 3)	35
5.6	Secondary Curing (Phase IV), Screening and Blending Process	35
5.7	Distribution and Product Quality Control Procedures	37
5.7.1	Shipping/Packaging Procedures	37
5.7.2	QC Testing for Application Rate/Use Controls	37
5.8	Additional Management Conditions/Procedures	40

5.8.1	Material Rejection/Reprocessing	40
5.8.2	Equipment Failure/Breakdown	40
5.8.3	Leachate Collection	41
6.0	FACILITY INSPECTION AND MAINTENANCE PROCEDURES	42
6.1	Routine Inspections of Tipping Building and Windrow Storage Area	42
6.1.1	Daily Inspections	42
6.1.2	Unsatisfactory Conditions	43
6.2	Inspection and Monitoring of Biofilter Odor Controls	44
6.2.1	Use of PID Meter For Breakthrough and Air Permit Limits	44
6.2.2	System Recharge/Change Out Procedures	44
6.3	Stormwater Basin Area Maintenance and Inspections	44
7.0	FACILITY PERSONNEL AND TRAINING REQUIREMENTS	45
7.1	Employee Responsibilities and Qualifications	45
7.2	Facility Training Program	46
8.0	CONTINGENCY PLAN AND EMERGENCY RESPONSE PROCEDURES	46
9.0	RECORDKEEPING PROCEDURES	46
9.1	Inspection Documents	46
9.2	Operating Records	46
9.3	Analytical Testing Result.....	47
9.4	Personnel Training	47
9.5	Incident Reports	47
9.6	Periodic Reports to DNREC	47
9.6.1	Quarterly Reports	47
9.6.2	Annual Reports	48

List of Attachments

Attachment I	Maps, Drawings and Diagrams
Attachment II	Acceptable Wastes
Attachment III	Soil Clean Fill Certification and Acceptance Criteria
Attachment IV	Staffing Plan
Attachment V	Facility Training Program
Attachment VI	Contingency Plan and Emergency Response Procedures
Attachment VII	Record Keeping Requirements and Forms
Attachment VIII	Finished Compost Batch Pile Sampling Procedure
Attachment IX	Odor Minimization and Monitoring Plan

1.0 FACILITY OVERVIEW

1.1 Purpose And Regulatory Overview

This Compost Facility Operations Plan (“FOP”) was prepared pursuant to the requirements of Section 2.5 of Chapter 1301 of the Delaware Regulations Governing Solid Waste (“DRGSW”) for the food waste compost facility operated by Peninsula Compost Company, LLC (“Peninsula”). The Peninsula facility is located at 612 Christiana Avenue, in Wilmington, Delaware, but also includes the Riverside Storage Yard located on a portion of 601 Christiana Avenue (directly across the road from the main facility). The facility consists of an eighteen (18) acre parcel located east of Interstate I-495, and south of the Christina River and an additional five (5) acre lot located across Christiana Avenue. This Facility Operations Plan provides detailed information on the operations of the facility (including incoming materials process, windrow construction and maintenance, composting process/cycle, marketing and distribution plans, and other related information). The Facility Operations Plan has been developed to ensure that all operations conducted are in compliance with all applicable Federal, State and local laws and regulations pertaining to composting facilities.

1.2 General Description

The composting facility recycles source separated food waste by using a specialized “in vessel” composting technology in order to produce quality compost and manufactured topsoil for resale in bulk. Food waste generally includes source separated meat, poultry, fish, fruits, vegetables, dairy products and other suitable discarded food materials, along with paper products, packaging and scrap paper that are routinely mixed with the food waste.

The facility receives food wastes from a variety of sources including restaurants, hotels, casinos, food importers, prisons, universities, colleges, schools, sports venues, and other similar institutions. In addition to food waste, the facility also receives hatchery waste and carbon source materials. These carbon source materials, such as leaves, brush, pallets, wood chip animal

bedding and trees, are required for the composting operation. These types of compostable materials are also used for moisture control during the composting process. Sandy soils will also be accepted for blending with compost to produce topsoil.

The Peninsula composting facility is designed to recycle 160,000 tons of material per year into compost material. Of the 160,000 tons of material, 120,000 tons will consist of food waste and 40,000 tons will come from leaf and wood type wastes. Up to 5,200 tons of hatchery waste can also be accepted for composting. An additional 40,000 tons of sandy soils may be accepted each year for top soil production.

1.2.1 Property Owner

The property where Peninsula Compost Company, LLC is located at 612 Christiana Avenue, Wilmington, Delaware 19801 is currently owned by Alma Properties, LLC, 529 Terminal Avenue, New Castle, Delaware 19720. The expanded portion of the facility, referred to as the Riverside Storage Yard, is located on the 601 Christiana Avenue property is also owned by Alma Properties, LLC.

1.2.2 Lease Agreement

The properties located at 612 and 601 Christiana Avenue, Wilmington, Delaware, 19801, are leased to Peninsula Compost Company, LLC, 15 McCullough Drive, Suite B, New Castle, Delaware 19720, by Alma Properties, LLC.

1.2.3 Former Site Remediation And Engineering Controls

The property located at 612 and 601 Christiana Avenue, Wilmington, Delaware, 19801, is subject to activity and use limitations described in an Environmental Covenant established by the property owner in May 2007. The limitations are required by the remedial action described in the Amended Final Plan of Remedial Action, for the Potts Property Site, Wilmington, DE (DE-0169) issued in August 2000. The property owner imposed and agreed to comply with the following activity and use limitations:

- a. Use Restriction: Use of the Property shall be restricted solely to those non-residential uses permitted within Commercial, Manufacturing, or Industrial Districts, respectively, as such district types and uses (including, without limitation, ancillary or accessory uses) are described and permitted, respectively, pursuant to the Wilmington City Code as may be amended from time to time;
- b. Interference with Remedy. There should be no digging, drilling, excavating, grading, constructing, earth moving, or any other land disturbing activities on the Property without the prior written approval of DNREC-SIRB;
- c. Limitation of Groundwater Withdrawal. No groundwater wells shall be installed, and no groundwater shall be withdrawn from any well, on the Property without the prior written approval of DNREC-SIRB.
- d. Compliance with Operations and Maintenance Plan. Perform all work required by the Operation and Maintenance Plan, as issued, approved, modified or amended by DNREC.

A copy of the Environmental Covenant is kept on file in Peninsula's, main office on 612 Christiana Avenue, Wilmington, Delaware.

1.3 Facility Service And Marketplace Overview

1.3.1 Recyclable Food Waste Materials

The facility provides a benefit to the community as an alternative to landfill disposal. The food and other organic matter wastes are converted into compost that is used in a variety of landscaping and agricultural applications.

The Gore® system, utilizing the forced aeration process in the windrows, aids in the biological decomposition of the food waste and carbon source materials without creating methane gas, a significant greenhouse gas emission. As a result of anaerobic decomposition of waste materials landfills are the largest generator of methane from anthropogenic sources, and food wastes produce more methane per ton than most other materials. Since the Gore® system precludes the formation of methane gas, considerable

benefits to the State of Delaware and the United States are achieved by removing the food waste from standard landfill practices.

The facility will process approximately 120,000 tons per year of food waste materials. Initially, up to sixty percent (60%) of all source separated food waste, and one hundred percent (100%) of the carbon source materials (tree parts, brush, yard wastes) are expected to come from sources within the state of Delaware.

Peninsula will concentrate its marketing efforts on sources within the state of Delaware. Reduced transportation costs, due to the proximity of the facility, will be attractive to Delaware users. Peninsula's goal is for sixty percent (60%) to eighty percent (80%) of all source separated food waste to be derived from Delaware.

Of the sixty percent (60%) initial source separated food waste stream, eighty percent (80%) would have been disposed of at the Delaware Solid Waste Authority Cherry Island Landfill. The Federal Environmental Protection Agency (EPA) estimates that composting food waste materials, instead of disposing of them in a landfill, produces a net decrease of 0.82 metric tons of carbon dioxide equivalent per ton of food waste, thus significantly reducing the overall greenhouse gas/carbon footprint from the state of Delaware.

1.3.2. Yard Waste, Wood Products, Tree Parts and Brush

Yard, wood and tree wastes provide important carbon source nutrients that aid in the composting process of food waste.

Yard waste is plant material that comes from lawn maintenance and other gardening and landscaping activities. This includes:

- Grass
- Leaves
- Prunings
- Brush and shrubs

- Garden materials
- Christmas trees
- Tree Parts

Yard waste takes up a considerable amount of space in Delaware landfills and impacts the capacity in those landfills to hold other wastes that can't be recycled or composted. The compost facility will provide a financially attractive disposal option for yard wastes that are now subject to the DNREC 2008 ban on landfill disposal.

1.3.3. Hatchery Waste

Hatchery Waste is an alternative option for composting materials and consists of non-fertile poultry eggs, poultry eggshells, poultry egg membranes, and dead poultry embryos. Peninsula compost may accept up to 100 tons of hatchery waste per calendar week, however, they must be from a list of approved hatcheries. The approved hatcheries are:

- Perdue Farms, Inc. – 9891 Old Princess Anne Road, Westover, MD
- Perdue Farms, Inc. - 7080 Zion Church Road, Salisbury, MD
- Perdue Farms, Inc. – 37 Delaware Avenue, Hurlock, MD

1.3.4. Clean Fill/Soils

Peninsula will also produce a manufactured topsoil by blending compost and other appropriate materials with sandy soils.

1.4 End Market Uses

End market strategies for Peninsula compost include agricultural, landscaping, nursery, public agencies and private individual markets. The agriculture industry is the largest potential market for high quality compost, by providing quality soil amendments for agricultural lands. The landscape industry, which includes residential and commercial landscape companies, use compost as soil amendments, to improve the quality of soil for plantings and reduce the cost of

soil replacement. Nurseries use compost to improve soils for tree and ornamental plantings and to protect seedlings. Compost is also used to provide moisture control around plantings in both the landscape and nursery markets. Many public agencies are in the market for compost materials for redevelopment projects, weed abatement, roadway maintenance and other landscaping projects. Individuals are also looking for sources of quality compost to use for landscaping projects on their own private property.

2.0 SITE ENVIRONMENTAL SETTING

2.1 Site Location

The site is located at 612 and 601 Christiana Avenue, Wilmington, DE 19801. The site is on the south side of I-495 Expressway west of the Christina River. The site is also a part of the Potts Property HSCA site which has been remediated under the State of Delaware's Hazardous Substances Cleanup Act (HSCA) Voluntary Cleanup Program.

2.2 Surrounding Land Use and Topography

The site is located in the M-2 zoning district. The nearest residential property is located approximately 0.25 miles to the west.

2.3 Water Resources

2.3.1 Onsite Water Supplies

Site is served by utilities from the City of Wilmington, DE, including potable water and sanitary sewer. There are no on-site potable water wells.

2.3.2 Surface Water Bodies

The only surface water body, other than the stormwater basins, is the Christina River, which is adjacent to the Riverside Storage Yard. This river is primarily used for merchant marine traffic. The site is engineered so that all runoff is collected in the

stormwater basin. There are additional visual controls and BMP's on site to prevent any material or debris from entering the Christina River.

2.3.3 Groundwater

2.3.3.1 Regional Public Water Wells and Intakes

The nearest public water supply well is located over 3000 feet away at Eden Park Gardens (DNREC Permit # 193611).

2.3.3.2 Private Potable Water Wells

A groundwater management zone has been established as part of the Potts Property HSCA remedial action. The Environmental Covenant for the Potts Property Site, which includes both 601 and 612 Christiana Avenue, includes a limitation on groundwater withdrawal. No groundwater wells shall be withdrawn on any well on the property without prior written approval of DNREC-SIRB.

2.4 Surface Drainage and Stormwater

2.4.1 Designated Flood Plain Areas

The main composting facility yard on 612 Christiana Avenue has certain portions of the site that are within the 100 year flood plain. However, all areas or locations where recyclable materials or wastes are stored onsite are located above or outside of the designated 100 year flood plain areas. The facility's Riverside Storage Yard Area is principally located within the 100 year flood plain, however, no food wastes or active compost materials are stored on this portion of the facility.

2.4.2 On-Site Drainage Controls

The site includes improvements which direct stormwater to one of the three stormwater retention basins on the composting site, two at the Composting Area, and one at the

Riverside Storage Yard. Additional Best Management Practice (“BMP”) improvements assist in controlling potential pollutants in the basin discharges.

2.4.3 Stormwater Retention Basins

There are a total of three stormwater retention basins on site. See Section 6.3 for additional information and operating/maintenance requirements.

2.5 Wetlands

There are freshwater wetlands and intertidal mudflat habitat on the site. No onsite operations/construction will be conducted in freshwater wetlands or protected zones.

2.6 Nuisance Dusts, Odors and Vector Controls

2.6.1 Dust Management Plan

Due to high moisture content of the feed stocks received in the Process Building, dust is expected to be minimal. The biofilter (See Section 2.6.2 below) is also effective in removing any dust from the air exhausted from the Process Building. Dust from operations in the Windrow Composting Area will be minimized by routine housekeeping practices including periodic use of street sweeper equipment. The W.L. Gore® covers used in the Windrow Composting Area have been proven effective in reducing odors in other facilities using this technology. No problems are anticipated.

2.6.2 Odor Controls

Exhaust air from the Receiving Building will pass through a biofilter before being discharged to the atmosphere. The ventilation system in the Receiving Building will provide 4 air changes per hour (42,000 cfm). The biofilter is designed for 42,000 cfm with a loading rate of 3 cfm/sq. ft. The biofilter uses a blend of wood chips and compost for the active media. The biofilter design is based on the design used at the Nantucket Compost Facility in Nantucket, Massachusetts. The odor removal efficiency of the Nantucket biofilter was determined to be 97% during acceptance testing.

An air curtain will also be used to mitigate odors which are not captured by the biofilter system or the Gore® cover system. The ChemStation air curtain is designed to release a “curtain” of an air along the southwest border of the WORC (Wilmington Organics Recycling Center) facility. The system will be put into use anytime winds are travelling in a southerly or westerly direction over the facility. The 600 foot long line sprayer system will release an odor control agent into the air to control liquid and gaseous phase odors.

A water spray truck is also used on-site to control odors. The truck holds approximately 2,500 gallons of water, to which 3 gallons of an odor control agent are added. This mixture is then sprayed on the area around the tipping building to prevent unpleasant odors.

The facility monitors and maintains its odor control systems at the site in accordance with an Odor Minimization and Monitoring Plan that has been established and approved by the Department of Air Quality. A copy of the most recent Odor Minimization and Monitoring Plan is included in Attachment IX for reference.

2.6.3 Vector Attraction Reduction

Vector attraction reduction requirements required by 40 CFR 503.33 will be met since the feed material will be covered with the W.L. Gore® covers at the end of each operating day during the first six weeks of the process. Extensive record keeping will document that the temperatures within the compost materials meet the requirements of processes to further reduce pathogens and vector attraction reduction per 40 CFR 503 regulations.

2.6.4 Litter Control

Peninsula will maintain good housekeeping practices in all operating areas of the WORC facility, including inside the Receiving Building, the Windrow Compost Area, the Phase III Area, the Screening/Phase IV Area and the Riverside Storage Yard including the Final Compost Storage Area Any litter

will be collected and placed in covered containers for ultimate disposal off-site in an approved disposal facility.

2.7 State and Local Permits

A copy of all state and local permits are kept in the General Manager's office.

The following table is a listing of permits required for the Compost Facility:

State and Local Permits	
Type of Permit	Date Received
Coastal Zone Act Permit	5/5/2008
NPDES Permit	11/4/2009
Air Permit Registration	9/28/2012

3.0 FACILITY DESCRIPTION AND ENVIRONMENTAL MANAGEMENT CONTROLS

3.1 Facility Layout and Design

The compost facility is located on Christiana Avenue in Wilmington, Delaware (See Attachment I- Drawings for site map). The facility design is based on the "in vessel" composting technology provided by W. L. Gore and Associates Inc. The proposed facility will include the following elements:

- Scale house
- Receiving Building
- Windrow Composting Area (includes Phase I and II)
- Phase III Primary Curing Area
- Screening Area
- Phase IV Secondary Curing Area

- Riverside Storage Yard (including the Final Compost Storage Area and the Wood and Yard Waste Storage Area)
- Biofilter
- Leachate collection
- Storm water collection
- Residual Storage Areas

The composting facility primarily consists of; a scale house where incoming shipments are weighed; an enclosed Receiving Building which accepts, on average, five hundred and thirty (530) tons of organic materials per day with a seven hundred (700) ton daily maximum, a forced aeration outdoor covered windrow composting operation where primary decomposition/break down of the food waste occurs; curing areas (including the primary and secondary areas) where the compost is stabilized and aged; a screening area where oversized material are segregated and the compost is made uniform; a wood and yard waste area to receive and prepare carbon source material; and a final product storage area where the finished materials can be tested and staged before final shipment offsite.

Recyclable food waste materials are brought to the facility in a variety of vehicles including, but not limited to, walking floor trailers, self-contained packers, rear loading trucks, and tri-axle dump trucks. An average of thirty-five (35) trucks per day, deliver material to the fifteen thousand six hundred twenty five (15,625) square foot Receiving Building. Trucks entering the facility are weighed on a truck scale at the scale house before they are directed to the Receiving Building, Wood & Yard Waste Storage Area, or the Final Compost Storage Area.

The Receiving Building is a pre-engineered building with a concrete foundation, and includes concrete push walls to allow front-end loaders the ability to maneuver in the building while handling the composting and carbon source materials. There are three (3) rolling steel doors in the building where trucks can enter to dump loads. Two doors accommodate the tipping of food waste while the remaining door is used for the receipt of carbon source materials. The doors are situated on one side of the building in order to eliminate cross ventilation. A ventilation system for the receiving facility consists of exhaust fans with the capacity to provide four (4) air

exchanges per hour. The air exhausted from the building is passed through a Biofilter that removes odors from the exhaust air.

Food waste is deposited directly in the Receiving Building by delivery trucks. Yard waste is deposited in one of 3 storage bins across from the front of the Receiving Building. Large carbon source materials are deposited in the Wood & Yard Waste Storage Area, where they are processed with a wood grinder and brought via front end loader and/or dump truck to the storage bins adjacent to the Receiving Building. The carbon source material and food waste are blended together in the Receiving Building by front-end loader. The material is blended to achieve a mixture with the proper C:N ratio, moisture content and porosity. The blended material is then loaded in to a slow speed shredder to size the material for rapid composting. The shredded mixture is conveyed to the twenty-five (25) foot by twenty five (25) foot Pre-composting Staging Building. A magnet removes metal from the blended material before it is deposited in the Pre-composting Staging Building.

Front-end loaders take the compostable blend from the Pre-composting Staging Building and place it into a windrow in the Windrows Composting Area. Each windrow created during an operational day is covered with the Gore® cover membrane system by the end of that day. Windrows cannot exceed 185 feet in length, 26 feet in width, or 12 feet in height. Adequate spacing is maintained between to ensure that the facility can access the compost during storage (aisle should provide 4 – 6 feet between the windrows).

On a daily basis, the windrow that has sat for the entire twenty-eight (28) day cycle is ready for the stabilization phase of the composting process. The Gore® cover is removed and front-end loaders move the material to the stabilization area creating a new windrow. There are fourteen (14) windrows in the stabilization area, of which three (3) are generally reserved as a capacity buffer.

On a daily basis, the windrow that has sat in the stabilization area for fourteen (14) days is uncovered and the material is moved by front-end loaders to the Phase III Primary Curing Area. The primary curing area consists of twelve (12) windrows.

Once the compost material has completed the eight weeks of windrow composting, stabilization, and primary curing, it is ready to be screened. After passing through an initial two inch screen in the Screening Area, the material is placed in the Phase III Secondary Curing Area where it is left to cure for another two (2) to sixteen (16) weeks. At that time, the compost material is screened again, or blended, to meet customer specifications. The compost material is then moved to an asphalt storage pad in the Final Compost Storage Area where it may be screened once more if necessary to meet market specifications.

3.2 Site Access and Traffic Management

3.2.1 Operating Hours

The facility will be open for receipt of compostable waste materials from 6am to 5pm Monday through Saturday. The facility will be closed Sundays and holidays. The facility will be open three hundred (300) days per year. The facility will accept on average five hundred thirty (530) tons of compostable material per day with a daily maximum of seven hundred (700) tons.

3.2.2 Site Security

The active composting portion of the facility (the 612 lot) is protected by a chain link fence and gates which will be closed during non-operating hours. The Secondary Curing Area, located on the southeastern portion of the 612 site is the only area which is not protected on all sides by the chain link fencing (the east side is bored by the Route 495 overpass). The Riverside Storage Yard has chain link fencing controlling access across the front (western) and northern perimeters of the property. Access to the remaining perimeter portions of the property is restricted by physical barriers, including the Christiana River (to the east) and the Lobdel Canal (to the south). There is a gate installed to limit access to the Riverside Storage Yard which is only opened during operating hours.

3.2.3 Area Roadway and Truck Routing

Materials will be delivered to the site by truck using Interstate I-495 and Terminal Avenue. Access from the City of Wilmington is via 4th Street and Christiana Avenue.

3.2.4 Internal Traffic Management and Procedures

3.2.4.1 Signs

Appropriate signage will be placed on the fencing, along the access road and on the exterior of the Process Building to direct trucks to the appropriate locations.

3.2.4.2 Directional Routing

Materials will be delivered to the site by truck using the proposed access road off of Christiana Avenue. The access road is over seven hundred and fifty (750) feet in length and will provide adequate queuing for trucks delivering materials to the site. Trucks delivering food waste to the facility are expected to be 100 cubic yard walking floor trailers, thirty (30)-thirty-five (35) cubic yard self-contained packers and sixteen (16) cubic yard rear loading trucks. Trucks delivering yard waste and brush are expected to be primarily thirty (30) cubic yard tri-axle dump trucks with some 100 cubic yard walking floor trailers. A total of thirty-five (35) trucks per day are expected to deliver materials to the Receiving Building.

Inbound trucks will be weighed on a truck scale at the scale house (see Site Plan). After being weighed, trucks will be directed to either the Receiving Building to off load food and yard waste or to the Riverside Storage Yard to off load large carbon source material, excess yard waste if there is overflow in the yard waste bin, and soil. Trucks will exit the site by the same access road used by inbound trucks. Trucks will weigh out at the scale house unless the tare weight for the delivery vehicle is on file.

3.2.4.3 Dispatch/Internal Communications

Peninsula personnel will have radios and/or instant messaging phones to enable prompt communications within the site.

3.3 Process Areas and Controls

3.3.1 Tipping/Receiving Building (Wood Grinding Equipment)

Food and yard wastes are weighed and off loaded at either the Receiving Building or the Wood & Yard Waste Storage Area. The yard wastes are placed in their designated storage bin, while the food is placed directly inside the building. The Receiving Building is shown on drawings M-1, A-1, and A-2 (see Attachment I- Receiving Building Drawings). Carbon source materials and food wastes must be blended and sized for use in the composting operation. A slow speed shredder located in the Receiving Building will be used for sizing and mixing of materials.

Some of the yard waste material (leaves/grass) will be off loaded and staged at the Wood & Yard Waste Storage Area until needed to mix with the food waste in the Receiving Building. Larger sized carbon source materials (i.e. wood, yard waste, and brush) will also be off loaded at the Wood & Yard Waste Storage Area. This material will be passed through a grinding machine to produce the required sized wood chips. The wood chips will be moved with a front end loader and/or dump truck to the storage bins located adjacent to the Receiving Building. From here, the wood chips will be moved into the Receiving Building as needed to be mixed with the food wastes. The total amount of waste including hatchery waste, food waste, yard waste, wood waste and animal bedding in the Receiving Building cannot exceed 935 cubic yards or 700 tons of material.

By mixing the waste and carbon source materials, the moisture content, particle size, porosity and carbon/nitrogen ratio are adjusted to create optimal composting conditions.

3.3.2 Storage Areas and Capabilities (Food/Wood Compost Feed Stock, Compost Storage Areas, Soil Storage Area, Residual Storage)

3.3.2.1 Pre-compost Staging Area

The slow speed shredder discharges the mixed material to a conveyor that discharges the material into a twenty-five (25) foot by twenty five (25) foot Pre-compost Staging Building. Once the material reaches the Pre-compost Staging Building, it is suitable for windrow composting. Once enough material is in the Pre-compost Staging Building, front-end loaders will move the material to a windrow for composting. All material placed into the Pre-compost Staging Building is put into a windrow before the end of each working day. The nature of the carbon source materials does not lend itself to odor issues. Therefore, carbon source materials can be left on the Receiving Building floor for several days.

3.3.2.2 Windrow Processing Area

The primary composting process takes eight weeks. The outdoor concrete/asphalt pad is separated into three distinct areas of operation. These areas include a Composting, Stabilization, and Primary Curing Area component. Materials are placed in the Composting Area (Phase I) for a period of four (4) weeks. These materials are subsequently moved to the Stabilization Area (Phase II) where they sit for a two (2) week period, and finally they are moved to the Primary Curing Area (Phase III) for the last portion of the primary composting process. As the composting process proceeds through each of the three stages, or phases, the volume and mass of the material is significantly reduced as wastes are broken down. This is the typical result of a composting process.

The Gore® system utilizes windrow composting with forced aeration, and containment within a semi-permeable membrane windrow cover. The Windrow

Composting Area of the facility consists of twenty-eight windrows. Each windrow is twenty-six (26) feet wide at the base, by one hundred and eighty-five (185) feet long and twelve (12) feet in height. The windrows shall be constructed to provide at least four (4) to six (6) feet of aisle space between the windrows. Each windrow contains approximately one thousand, one hundred (1,100) cubic yards of composting material. Each windrow has a concrete head wall to retain the material in the row on the compost pad. Two aeration trenches are under each windrow. Each trench serves as a duct to provide air to the windrow and to collect leachate seeping from the composted material. Each windrow is equipped with a blower that provides air to the composting material via the aeration trenches. The trenches are constructed of cast concrete to provide a solid and impervious surface. The compost pad itself is constructed of either concrete or asphalt. This impervious cover allows for the collection of all storm water and leachate.

It is the cover membrane that distinguishes this system of composting from other composting methods. The cover membrane is porous and each of the pores is sized to be able to selectively influence the composting process. The cover membrane allows for the release of carbon dioxide through the cover without allowing offensive odors from escaping. The cover membrane is constructed in such a way as to prevent rain water from passing through to the curing compost below.

Once a windrow has been established, the Gore® cover membrane is placed over the entire row using a mobile gantry reel. The gantry reel is used to easily install and remove the cover membrane from the windrows. Once the cover membrane is in place and secured, temperature and oxygen probes are installed through the cover and into the composting material. The blowers are then turned on and controlled by a PLC (programmable logic controller) to optimize the composting process using readings directly from the temperature and oxygen sensors.

This system includes a cover and air distribution component, optimizing the compost process by providing moisture control. The cover protects the curing compost from rainwater and the sun and at the same time controls the amount of moisture that is lost through the cover. The blower maintains pressure under the cover and insures a homogeneous air distribution throughout the compost material. The cover system creates a barrier against dust, bacteria, and odor.

3.3.2.3 Manufactured Soil

In addition to the compost material, Peninsula produces a manufactured top soil by blending compost with sandy soils. The blending ratio will vary based on the characteristics of the soil materials used for blending. Typically the ratio calls for one (1) part compost to one (1) part soil, however, the ratio may be changed to one (1) part compost to two (2) parts soil. The mixing of the compost and soil will be achieved by using front-end loaders and then the material will be screened.

3.3.2.4 Material Storage

Yard wastes such as lawn clippings and leaves are stored in a temporary storage bin located in front of the Receiving Building. Large carbon source materials such as wood pallets are temporarily stored at the Wood & Yard Waste Storage Area until it is shredded and moved to the storage bins located adjacent to the Receiving Building. The shredded material is stored here until it is blended with the food waste in the Receiving Building. In accordance with Section III.D of the BUD, the storage bins may not store more than 470 cubic yards of material at any one time. Note some of the excess yard waste material (leaves/grass) not stored in a storage bin will be off loaded and staged at the Wood & Yard Waste Storage Area until needed to mix with the food waste in the Receiving Building.

Source separated food waste and carbon source materials are temporarily stored in the Receiving Building. Food waste is typically moved out of the Receiving Building after being combined with carbon source materials through the slow speed shredder. The mixed material is deposited in the Pre-compost Staging Building. From the Pre-compost Staging Building, material is transferred to a windrow and covered with the Gore® cover system before the end of each day. Carbon source materials are not putrescible and may be stored in the Receiving Building for several days at a time.

As the mixed food waste and carbon source moves through the primary or active composting process, the compost materials are stored in one of the three operational areas (in windrows) depending on the stage/phase of the composting. The material is originally placed in Phase I of the Windrow Compost Area, where each windrow is covered with Gore ® covers. As discussed in Section 3.3.2.2 above, following the active composting in Phase I, the compost is moved to the Stabilization Area, or Phase II of the Windrow Composting Area, where the compost is again covered. The compost material is finally placed into the Phase III, then is moved to the Primary Curing Area. The combined capacity of the Windrow Composting Area (Phase I & II) is 46,200 cy. The Phase III Area may be used to store up to 13,200 cy of material during primary curing.

Once materials have completed the primary composting process , they are moved to the Screening Area to be processed through a 2 inch screen. No more than 4,500 cubic yards of completed Phase III material may be stored in the Screening Area while awaiting screening. . Once the Phase III compost has been screened to 2 inch minus, the material is placed into either the Phase IV Secondary Curing Area on the 612 Christian Avenue side of the plant or the Phase IV compost may be placed in the Final Compost Storage Area of the Riverside Storage Yard on 601 Christiana Avenue. The facility may not store more than 15,000 cy of Phase IV compost in the Phase IV Secondary Curing

Area. The secondary curing, or maturing, process will vary based on the time of year and the compost material itself, but generally takes 2 – 16 weeks . Following secondary curing, the Phase IV compost is then screened to ½ inch minus, or to meet customer specifications to produce a finished compost product.

The finished compost is moved to the Final Compost Staging Area on the Riverside Storage Yard, where the material is initially placed into windrow batch piles until it can be sampled and analyzed in accordance with the requirements specified in Section 5.7.2 below. Each windrow batch pile is limited to twenty-six (26) feet in width, twelve (12) feet in height, and may contain a maximum of 2,200 cubic yards of finished compost material as specified in Section II.N of the BUD.

The Riverside Storage Yard located on 601 Christiana Avenue will be used only for the following activities:

- 1) Storage of finished compost prior to analytical testing
- 2) storage of marketable, ½ inch (or smaller) screened compost;
- 3) the storage of approved, high-carbon wood and yard waste feedstock, including screened-overs from the 2 inch minus and ½ inch screening process that are suitable to be returned to the compost process as feedstock;
- 4) additional screening of the already ½ inch (or smaller) screened compost to meet market specifications;
- 5) final curing of the ½ inch (or smaller) screened compost, if necessary to meet market specifications; and
- 6) grinding of the approved wood and yard waste. A Process Flow Diagram of the compost process is included in Attachment I with the current the Site Plan.
- 7) Storage of Phase IV compost per Section III.E of the BUD.

- 8) Manufactured soil (this material must be segregated and identified and may not exceed a maximum soil storage capacity of 10,000 cubic yards.

The Final Compost Storage Area, of the Riverside Storage Yard, may not exceed an aggregate storage capacity of 25,000 cy, or 18,750 tons, of finished compost, compost awaiting analysis, or Phase IV materials, as depicted on the Site Plan. The storage in this area will vary as necessary to meet market conditions. The remainder of the Riverside Storage Yard is dedicated to the Wood & Yard Waste Storage Area. This area can be used to store up to 14,500 cy of wood and yard waste. Screened overs from ½ inch screening process and 2” minus screened overs can be stored on the rear portion of the property. An access road will be located along the edge of the Riverside Storage Yard to allow ingress and egress of vehicles and equipment. Final compost product may also be moved back across Christiana Avenue to stage the material in the Phase IV Area to meet season market changes.

3.3.2.5 Residual Storage

Residuals generated by the facility during the composting process (i.e., non-biodegradable material or prohibited waste types, such as plastic, glass, metal, etc.) that are segregated and removed during the process are staged in one of the two designated areas, as depicted on the facility Site Plan, prior to being sent offsite for further processing, reuse, or disposal. Residuals are primarily sorted and removed either in the Receiving Building or at the Compost Screening Area. Consequently, the Residual Staging Areas are located proximate to these two locations. Residuals are sorted and segregated when the loads of food and/or wood waste arrive at the facility and are unloaded and inspected in the Receiving Building and/or Wood & Yard Waste Storage Area as described in Section 4.0 and 5.0 below.

Residuals that are not immediately sorted and placed back onto incoming vehicles, or rejected outright, are sorted and are set aside in the Receiving Building until they can be transferred into a container and placed into the outdoor Residual Staging Area, located adjacent to the Receiving Building. Materials separated in the Receiving Building will be placed into containers by the end of the operating day. Each Residual Staging Area may not contain more than 160 cubic yards of material at any time. Residuals will be shipped offsite for further processing or disposal within 72 hours or, within the same day the storage container becomes full as specified in Section III.E of the BUD.

At the Screening Area, any screen-overs, such as plastic and oversized wood materials will be separated during the screening process. Wood materials may be sent back for further chipping and/or used as carbon source materials. They will be stored in one of the temporary storage bins in front of the Receiving Building. Other items removed during screening, such as plastic or any other material deemed inappropriate for composting will be segregated as process residuals. These process residuals will be staged in the outdoor Residual Staging Area near the Screening Area as depicted on the Site Plan. This Area is a three-sided concrete bunker or bin area where the process residuals may be staged until the material is subsequently containerized and shipped offsite for further processing, reuse, or disposal. Again, no more than 160 cy of residuals may be staged in this area at any time. The process residuals will be shipped offsite within 72 hours of being generated.

3.3.3 Biofilter Unit Design and Operating Procedures – Air System Management System

Exhaust air from the Receiving Building will pass through a Biofilter before being discharged to the atmosphere. The ventilation system in the Receiving Building will provide four (4) air changes per hour (42,000 cfm). The Biofilter is designed for 42,000 cfm with a loading rate of 3 cfm/sq. ft. The biofilter uses a blend of wood chips and compost for the active media. The Biofilter is based on the design used at the Nantucket

Compost Facility in Nantucket, Massachusetts. The odor removal efficiency of the Nantucket Biofilter was determined to be ninety-seven percent (97%) during acceptance testing.

The biofilter system is maintained and/or repaired on a as need basis, contingent on site monitoring and observations as discussed here. The static pressure within the air handling system is monitored periodically to determine if there is any clogging or channeling within the biomedial. If clogging is indicated (by an increase in static pressure) the media may be “fluffed” or turned over to eliminate possible back pressure in the system. Conversely, if channeling is indicated (by a pressure decrease) additional biomedial will be added as required to mitigate any channeling within the biofilter.

The system is also tested on a weekly basis for moisture content. A biofilter system operates most effectively at relatively high moisture levels (approximately 40-60% moisture). Accordingly, if drying is observed, the biomedial will be sprayed with water to add moisture, as required to, maintain the system’s odor control efficiency. Finally, the height of the filter media is observed for possible settling on a regular basis. Settlement is generally considered to be any area of the surface of the biofilter where the media has dropped more than one (1) foot below its original depth. This level of settlement is an indicator of potential clogging. If settlement is observed, the biomedial in that area is turned over or fluffed to prevent clogging.

The biofilter unit was generally designed in accordance with the principals specified in the U.S. EPA guidance document “Using Bioreactors to Control Air Pollution” (EPA-456/R-03-003, Sept. 2003). Based on this design, the filter media will be replenished approximately every three (3) years.

Due to the high moisture content of the feed stocks received in the Receiving Building, dust is expected to be minimal. The Biofilter is also effective in removing any dust from the exhaust air.

3.3.4 Gore® System Equipment (Windrow Covers, Monitoring Systems)

The Gore® System consists of three components; aeration, control and a semi-permanent membrane windrow cover. To provide the essential habitat for the aerobic micro-organisms to process the food waste and carbon source materials into compost, a medium pressure aeration system is necessary. Peninsula uses a system of windrows equipped with two aeration trenches under each one. Each trench serves as a piping duct to provide air to the windrow and collect leachate. Each windrow is equipped with a blower that provides air to the composting material through aeration pipes that line the trenches.

The aerators are controlled by set parameters that are monitored directly from the compost pile by the use of stainless steel probes which monitor temperature and oxygen that are placed in the pile prior to placement of the Gore® system membrane windrow cover. Data from the probes is fed to a computer where it is stored, documenting the course of decomposition. Aeration flow rates are adjusted automatically based on the data from the probes to insure consistent compost decomposition is achieved.

3.3.5 Screening Area and Equipment

During each day of operation, a fourteen (14) day old windrow in the Primary Curing Area is moved by front-end loader to the Screening Area, where the material is processed through a finger screen or equivalent. The screen includes a feed hopper and feed conveyor and is fixed in position and powered by electric motors. The capacity of the screen is set to accommodate one hundred and seventeen (117) cubic yards of composted material per hour. The compost material is collected in a concrete bunker positioned below the screener. Front-end loaders move the material from the bunker to the Secondary Curing Area.

Screen-over's, collected in a concrete bunker at the discharge end of the screen, and primarily consisting of plastic and oversized cardboard materials, may be either further segregated or sent offsite for further processing, re-use, or disposal.

3.3.6 Other Facility Process/Management Equipment

The following is a list of process equipment that will be used at the compost facility:

- One (1) slow speed shredder
- One (1) wood grinder
- Four (4) front-end loaders with 8 cubic yard buckets
- One (1) Komptech finger screen or equivalent
- One (1) trommel screen or equivalent
- Pickup truck
- Maintenance truck
- Sweeper truck
- Water truck

All fixed equipment, such as the shredder, ventilation fans and screen, will be powered by electric motors. The wood grinder and second screen are mobile equipment and are powered by diesel motors.

4.0 PROCEDURES FOR APPROVAL/ACCEPTANCE OF COMPOST FEED MATERIALS

All materials to be processed at the Peninsula composting facility must be approved in advance as detailed in the following sections.

4.1 Food Scraps and Byproducts

The wastes to be recycled will consist of food waste (meat, poultry, fish, fruits, vegetables, dairy products) and including some paper products mixed with food wastes. The source of the source separated food waste will be restaurants, hotels, casinos, food importers, prisons, colleges, schools, sports venues, and other institutions. A listing of Acceptable Wastes is provided in Attachment II.

Peninsula will have a dialogue with each vendor, explaining both acceptable and unacceptable materials. Each vendor will be provided with a list of acceptable wastes before they can be preapproved to haul wastes to the WORC facility. Upon arrival, each driver will identify the waste in their truck and the load will be screened at the Receiving Building.

4.2 Yard Waste, Wood Products, Tree Parts & Brush

4.2.1 Sources

Other materials will be accepted at the facility as required to provide the carbon necessary for composting operations as well as for moisture control. These other materials will consist of yard waste, leaves, brush, pallets, wood chip animal bedding and trees. All wood waste must be non-treated. Painted, coated or wood that has been pressure-treated, such as Chromate Copper Arsenate (CCA) treated wood, commonly called “green-treated” wood, or creosote treated wood (e.g., telephone poles, railroad ties), will not be accepted for composting operations and are subject to the evaluation and inspection procedures detailed in Section 4.2.2 below. The wood waste provides both a carbon source required for the composting process and also serves as a bulking agent allowing air to move through the composting windrows. Wood waste will be chipped to the required size (the wood waste used for the carbon source will be a smaller size than the wood waste used for as a bulking agent).

It is expected that the wood waste will be obtained from residential, commercial and industrial landscaping and management operations conducted throughout the local area. The facility may also accept trees, branches, stumps and other land clearing materials that are amenable to chipping operations.

Sources of the wood waste must be pre-approved prior to their shipment to the facility. Peninsula will send the appropriate paperwork to potential generators or their brokers upon request. Once Peninsula has received a completed form with a signed certification (that includes confirmation that no CCA or creosote treated wood waste will be shipped to the site), any required State or local documentation, and results of laboratory analyses for a prospective wood waste source, that information is reviewed to assure the wood

waste meets all requirements of Peninsula's permits and the materials can be properly processed. If the wood waste source is deemed approvable and appropriate financial terms are settled, Peninsula assigns an approval number to the job, notifies the vendor/source and sends Site Entry Tickets. The vendor and Peninsula will coordinate the shipping/delivery of the wood waste materials to the site.

4.2.2 Evaluation/Inspection Procedures (may include lab analysis)

Incoming vehicles will be weighed and directed to either the Receiving Building, or the Wood & Yard Waste Storage Area. If the vehicle contains large carbon source material, it will be directed to the Wood and Yard Waste Storage Area where the material will be deposited. If the vehicle contains food or yard wastes, it will be directed to the Receiving Building where the material will be offloaded. If the incoming vehicle contains soil it will be directed to the Final Compost Storage Area where up to 10,000 cy of soil can be stored in accordance with Section III.G of the BUD.

All incoming vehicles will be visually scanned to prevent non-acceptable material from being deposited on the site. Operators will review the loads for trash, debris, prohibited waste and non-recyclable materials such as painted, coated or treated wood wastes. A spotter will visually review the material deposited and debug all material, as required. Debris, trash, plastic, oversized rock, etc. can be easily identified in the load during this inspection by the spotter. The spotter will also inspect the load for any wood waste with the following characteristics, which may indicate that the material had been pressure treated:

- A green tint or green coloring to the wood (may indicate presence of CCA);
- Ammonia or creosote (coal tar) odors (indicates wood may have been treated);
- End tags or quality markings on the wood identifying the material as treated wood (commercial lumber requires marking).

The spotter will place any residuals removed during this evaluation/inspection process either back onto the incoming vehicle to be returned to the original generator, or the materials will be segregated and set aside in the Receiving Building or at the Wood &

Yard Waste Storage Area. Any residuals remaining will be segregated and placed in proper containers and/or storage bins by the end of the operating day and placed in the Residual Staging Areas as discussed in Section 3.3.2.5 above. Residuals will be shipped offsite within 72 hours of the container becoming full to an appropriate facility for further processing, reuse, or disposal.

During the incoming visual inspection of vehicles, all unacceptable material, other than incidental amounts which may be present in the load, will be rejected from entering the site. Any unacceptable material not intercepted during the incoming inspection will be segregated and, either reloaded back onto the incoming vehicle, or stored in the Residual Staging Area for transport to a proper disposal facility or another offsite facility for further processing or reuse.

4.3 Hatchery Waste

4.3.1 Sources

Hatchery waste consists of unused or unwanted materials from hatcheries including non-fertile poultry eggs, poultry eggshells, poultry egg membranes, and dead poultry embryos. Peninsula may accept up to 100 tons per calendar week of hatchery waste from pre-approved hatcheries. The list of approved hatcheries is noted in Section III.A of the BUD is as follows:

- Perdue Farms, Inc. - 9891 Old Princess Anne Road, Westover, MD
- Perdue Farms, Inc. – 7080 Zion Church Road, Salisbury, MD
- Perdue Farms, Inc. – 37 Delaware Avenue, Hurlock, MD

Hatchery wastes from any facilities which are not approved are prohibited and will be rejected.

4.3.2 Inspection

Hatchery waste is inspected visually as it is dispensed or unloaded. It is unloaded inside the receiving building in an area separate from any yard waste materials.

4.4 Soil/Clean Fill

4.4.1 Sources

The manufactured topsoil product to be produced involves the blending of the compost material with sandy soil. The soil used for blending must meet DNREC's Clean Fill criteria since it will be marketed to end users as topsoil which will likely involve a final use in a variety of settings.

4.4.2 Pre-Approval – Testing and/or Due Diligence Review

Peninsula will send the appropriate paperwork to soil generators or their brokers upon request. Once Peninsula has received a completed form with a signed certification, any required State or local documentation, and results of laboratory analyses for a prospective soil source, that information is reviewed to assure the soil meets all requirements of Peninsula's permits and the materials can be properly processed. If the soil source is deemed approvable and appropriate financial terms are settled, Peninsula assigns an approval number to the job, notifies the vendor/source and sends Site Entry Tickets. The vendor and Peninsula will coordinate the shipping/delivery of the soil(s).

Incoming loads will be subject to certain limitations such as a 10% limit (by weight) of non-inert material for the soil/clean fill material. Attachment III contains a Soil Certification Sheet and Soil Acceptance Criteria. Peninsula may modify the acceptance criteria at a later date depending on operational experience.

4.5 Rejection Procedures

All incoming vehicles will be visually inspected to prevent non-acceptable materials from being accepted and/or deposited at the site. If the visual inspection indicates that the vehicle's contents are not acceptable, the vehicle will be directed to a holding area. Peninsula personnel will contact the generator by phone and describe the reason(s) for the rejection. The vehicle's driver will be directed to return the load to the generator for further action. Peninsula personnel will document all actions related to any rejected loads in the Daily Operating Log maintained at the site.

5.0 COMPOST FACILITY PROCESSING AND TREATMENT PROCEDURES

5.1 Material Acceptance Procedures

5.1.1 Scheduling

The facility will be open to accept waste from 7 AM -5 PM six days per week (closed Sundays). This ten hour period will be adequate to receive material from the expected daily average of 35 trucks. The site road leading to the scale will provide adequate space for queuing vehicles if several trucks arrive at the same time.

5.1.2 Receipt/Log-In

Materials will be delivered to the site by truck using I-495 and Terminal Avenue. Access from the City of Wilmington is via 4th Street and Christiana Avenue. Inbound trucks delivering food or yard waste will be weighed on a truck scale at the scale house upon entering the site (see site plan). After being weighed, trucks will be directed to off load food wastes at the Receiving Building. Yard waste will be directed either to the Receiving Building or the Wood & Yard Waste Storage Area, where the load will be visually inspected. Trucks will exit the site using the site exit adjacent to the Receiving Building.

Each inbound load of soil will be accompanied by a site entry ticket provided to each approved generator as part of the preapproval testing procedure as outlined in Section 4.4.2. The site entry ticket will be utilized to create the weight ticket when the vehicle is weighed in at the facility. Once the truck delivering soil is weighed in it will be directed to offload in the Finished Compost Storage Area.

A ticket identifying the type of material, delivery vehicle identification, source of material and weight will be generated for each delivery to the facility. Weight tickets and site entry tickets will be retained onsite for a period of three (3) years.

5.1.3 Unloading

Trucks delivering food and hatchery waste to the facility will dump waste in the enclosed Receiving Building. In-bound waste is dumped in a 125 ft by 125 ft area with a concrete floor. Trucks delivering all large carbon source waste will dump waste at the Wood & Yard Waste Storage Area where it will be temporarily staged prior to blending in the Receiving Building. Yard waste will be deposited in the temporary storage bins across from the Receiving Building, unless there is overflow in which case they would be delivered to the Wood & Yard Waste Storage Area as well. The overhead clearance on the floor of the Receiving Building is 30 ft to allow for clearance required by trucks dumping loads.

The building includes three rolling steel doors each 14 ft wide. These doors allow trucks to enter the Receiving Building. All doors are located on one building elevation such that there will not be a cross ventilation through doors facing different directions.

5.1.4 Inspection

All incoming vehicles will be visually inspected to prevent unacceptable materials from being accepted and/or deposited at the site.

5.1.5 Material Acceptance/Rejection

All incoming vehicles will be visually inspected to prevent unacceptable materials from being accepted and/or deposited at the site. If the visual inspection indicates that the vehicle's contents are not acceptable (i.e., the shipment contains more than an incidental amount of unacceptable or prohibited materials) the vehicle will be directed to a holding

area. Peninsula personnel will contact the generator by phone and describe the reason(s) for the rejection. The vehicle's driver will be directed to return the load to the generator for further action. Peninsula personnel will document all actions related to any rejected loads in the Daily Operating Log maintained at the site.

5.1.6 Vehicle Log Out Procedures

Trucks will weigh out at the scale house unless the tare weight for the delivery vehicle is on file.

5.2 Shredding/Blending Process

5.2.1 Blending Rates/Process Control

Yard waste and food/hatchery waste is deposited in the Receiving Building by delivery trucks and/or front end loaders. The carbon source material and food/hatchery wastes are blended together by front-end loader. The material is blended to achieve a mixture with the proper C:N ratio, moisture content, and porosity. The blended material is conveyed to the Pre-composting Staging Building. A magnet removes metal from the blended material before it is deposited in the Pre-composting Staging Building.

The mixed material deposited in the pre-compost staging area is ready to be moved to a windrow by front-end loader. All material deposited in the pre-compost staging area will be placed in a windrow by the end of each day.

The facility operating procedure is, when possible, for all food and hatchery waste material received during each day be mixed, shredded and placed in a windrow and covered with the Gore® cover system before the end of each day. Handling food wastes promptly will minimize odor generation. In some cases due to late deliveries of food wastes it may not be possible to process all food wastes during the day the material is delivered. Except in instances of equipment failure, all food waste, if not processed in

the day it is delivered, will be processed within 24 hours of its delivery to the Receiving Building. The carbon source material doesn't have any significant odor; some of this material may remain on the Receiving Building floor for several days.

5.2.2 Equipment And Material Handling Details

The facility operations rely largely on the use of front-end loaders for material movement through the processing cycle. The facility will use four front-end loaders, and as such loaders are expected to be available at all times. Front-end loaders can be used to mitigate any effects of Receiving Building equipment failure. Blending carbon source materials with food waste dramatically reduces the odor emissions from food waste. A front-end loader can be used to mix the materials on the tip floor to minimize odor generation. The front-end loader can then be used to move the material from the Receiving Building and placing it in a windrow with a Gore® cover subsequently covering the windrow. With this contingency plan of operation, even in equipment failure conditions, no food waste will remain on the Receiving Building floor longer than 48 hours.

5.2.3 Quality Control

Quality control of the shredding/blending process is critical. The composting process using the Gore® technology depends on blending the food waste and the carbon food source materials to produce with mixture with an optimal moisture content, particle size, porosity and carbon/nitrogen ratio.

5.3 High Rate Composting – (Phase I)

The high rate composting process begins with a front-end loader moving the material from the pre-composting staging area to a windrow in the composting section to begin the four week composting period. The average daily volume of material received in the Receiving Building is approximately 1,000 cubic yards, which is approximately the volume of one windrow. Each day

of operation (six days per week) one windrow will be constructed in the composting area and one windrow will be moved from the composting area to the stabilization area. By the end of each day all material has been removed from the pre-composting staging area, a new windrow has been constructed in the composting and stabilization sections, the Gore® covers have been installed over the new windrows and, the temperature and oxygen probes have been installed and the blowers have been turned on.

The composting section contains 28 windrows. One windrow is constructed each day. A total of 25 windrows are required based on average conditions and normal operations. Three windrows are not required under these conditions. These three windrows provide a buffer capacity for situations of higher than average input conditions or if there are any delays in material movement in the composting process. This added volume will also provide additional capacity in the event that the recycling of wood chips recovered from the screening process proves to be beneficial.

Each day of operation (six days per week) the cover is removed from a 28 day old windrow in the composting section. This material is then moved by front-end loader to build a new windrow in the stabilization section. By the end of each day, the new windrow in the stabilization phase has been covered with the Gore® cover and the forced aeration system is activated.

5.4 Stabilization (Phase II)

The stabilization section consists of 14 windrows. Through the composting process a significant reduction in volume of material occurs. The average daily volume of material entering the stabilization section is approximately 860 CY. Based on this volume, it requires approximately 14 windrows to provide 14 days of process time in the stabilization phase.

Each day of operation (six days per week) the cover is removed from a 14 day old windrow in the stabilization section. This material is then moved by front-end loader to build a new windrow in the Phase III Primary Curing Area. At the same time, the material from a 14 day old windrow in the curing section is moved by front-end loader to the screening area.

5.5 Primary Curing (Phase III)

The Phase III Primary Curing Area consists of 12 windrows. Through the stabilization process a significant reduction in volume of material occurs. The average daily volume of material entering the Primary Curing Area is approximately 700 CY. Because of this it requires approximately 12 windrows to provide 14 days of process time in the stabilization phase.

5.6 Secondary Curing (Phase IV), Screening And Blending Process

At the completion of eight weeks of windrow composting, stabilization and primary curing, the compost is ready to be screened. The material will be moved to the Screening and Phase IV Secondary Curing Area. The facility will employ both portable and stationary screening equipment to screen the compost. . The screens can typically be used for both primary and finishing screening and have openings which may range between 2" and 3/8" in size. The facility has the capability of screening 100 cy or more per hour depending on the settings. The Screening and Secondary Curing Area consists of an impervious asphalt surface with a storm water drainage system.

Following the primary curing, the facility will process the Phase III compost material through the screening equipment to generate a two (2) inch minus blend. This process removes any large wood pieces or residuals but allows the material larger than 1/2" to remain in the compost blend. This larger material facilitates greater air movement in the pile for the next phase of curing and maturation. The screened (2" minus) Phase IV compost will be moved to the Secondary Curing Area by front-end loader. The screen overs, which will primarily consist of large wood and cardboard, and residual waste (plastic, glass, etc) will be segregated and may be further separated or sent offsite for further processing, reuse, or disposal. The Phase IV compost will again be placed in windrows and may be staged in the Secondary Curing Area or Final Compost Storage Area for approximately two (2) to sixteen (16) weeks to complete the maturing process.

Once the secondary curing is complete, and the Phase IV compost material has sufficiently aged, a final screening is completed at 1/2" minus in size. Screen overs from this finishing process will be segregated at the discharge end of the screen and are expected to primarily consist of oversized wood waste with incidental amounts (i.e., 0.5% by wt.) of residual waste. These screen overs will be either reintroduced to the composting process by bringing the overs to the temporary storage bins (or staged on the 601 site as feedstock) or the material will be sent offsite for further processing, reuse, or disposal as outlined in Section 3.3.2.5 above. The finished compost product will be moved to the 601 Christiana Road Final Compost Storage Area, as depicted in the Site Plan and as described in Section 3.3.2.4 above. In accordance with Section II.N of the BUD, finished (1/2" screened) compost will be placed into segregated windrow batch piles until sampling and analysis can be completed in accordance with Section 5.7.2 below. Each windrow batch may comprise up to a maximum of 2200 cubic yards (windrow batch piles will maintain a maximum width of 26 feet and a maximum height of 12 feet). Once the analytical results indicate that the batch meets the end product performance criteria, the finished compost may be stockpiled (non-windrow storage) in the Final Product Storage Area until it is sent offsite for use. The finished compost product may also be stored in the Phase IV Area as needed to provide added product storage for seasonal variations in market conditions.

In addition to compost, the facility will produce manufactured topsoil. This product will be produced by blending compost with sandy soil. The blending ratio will vary depending on the characteristics of the soil material used for blending. The ratio is likely to vary from one part compost/one part soil to one part compost/two parts soil. Production of topsoil will be accomplished by mixing soil and compost with a front-end loader and then screening the mixture in the trommel screen.

Demand for products will change seasonally. As such, finished products will be stored on the asphalt pad until required.

5.7 Distribution and Product Quality Control Procedures

5.7.1 Shipping/Packaging Procedures

The facility will produce two products, topsoil and compost. These products will be sold in bulk by the truck load. It is expected that the primary users will be commercial landscapers and agricultural applications. Some material may also be used by residential users. Topsoil and compost customers will initially go to the scale house to purchase these products. The driver will get a ticket and proceed to the finished product storage area. Peninsula staff will load the appropriate amount and type of material into the customer's truck by front-end loader. Volume will be determined by truck capacity or in the case of partial truck loads by number of loader buckets.

5.7.2 QC Testing for Application Rate/Use Controls

The composting process used at the recycling facility will meet the criteria for a process to further reduce pathogens (PFRP) in accordance with 40 CFR, Part 503. The composting process is monitored continuously through the Gore® system during the 28 day composting phase and during the 14 day stabilization phase. The material is covered with the Gore® cover system during these phases and temperature is monitored continuously. Temperature records are recorded in the computer based control system used to operate the aeration blowers. These temperature recordings will be used to verify that temperatures of the compost remains above 131°F for three (3) consecutive days to satisfy the requirements to further reduce pathogens (PFRP) and vector attraction reduction, as per 40 CFR Part 503 regulations.

Each batch of finished compost product will be sampled and analyzed to demonstrate that the material meets the end product performance criteria specified in Table 1 below. All sampling will be completed in accordance with the Finished Compost Batch Pile Sampling Procedure (see Attachment VIII). This sampling plan generally meets the

sampling procedures as outlined in Test Methods for the Examination of Composting and Compost (TMECC). However, it increases the sampling frequency to meet the requirements of Section II.N of the the recently approved BUD and establishes the number of sampling points at 3. A batch of finished compost is defined as a single windrow that has completed Phase IV and has been screened through a ½” screen (or smaller) as detailed in Section 5.6 above.

As outlined in Section 3.3.2.4, each windrow batch may not exceed 2200 CY and must be stored separately from other finished compost batch piles until analytical testing of the batch demonstrates that it meets the end product performance criteria. Samples will be collected in accordance with the Finished Compost Batch Pile Sampling Procedure provided in Attachment VIII.

Pursuant to Section II.N of the BUD, in the event that a batch of material fails to meet the established performance criteria in Table 1, Peninsula will notify the Department in writing within 24 hours, or the next business day, of the receipt of the batch pile test data. The notification must also inform the Department of the corrective measures that will be taken to address the failed batch and what will be done to prevent future failures.

If the batch of finished compost fails to meet any of the quality criteria parameters listed below, Peninsula will not market the compost product until either the company receives written approval from the Department of an appropriate alternate end use or additional management with subsequent analysis of the same batch meets the compost quality criteria requirements. The compost quality criteria parameters include:

- Maturity
- Soluble Salts
- pH
- Total Inerts
- Plastic
- Moisture Content
- Carbon to Nitrogen Ratio

If a batch of finished compost fails the performance criteria for Salmonella, Fecal Coliform or any metal listed on Table 1 as specified in Section II.N.6 of the BUD, the entire batch must be properly disposed of within 30 days of receipt of the analytical results.

TABLE 1 PERFORMANCE AND ANALYTICAL CRITERIA	
PARAMETERS	CRITERIA
Maturity	>7 based on Solvita® Compost Maturity Index
Soluble Salts (Conductivity)	<10 mmhos/cm
Salmonella	<3MPN per 4 g dry wt.
Fecal Coliform	<1,000 MPN
pH	5 - 8.5
Total Inerts	<1.0 %
Plastic	<0.5 %
Moisture Content	40 – 50%
Carbon to Nitrogen Ratio	10:1 to 15:1
Compound	Based on Delaware Uniform Risk-Based Remediation Standard (URS)* (All results in mg/kg dry weight basis)
Arsenic	11
Cadmium	4
Chromium	35 (Cr VI)
Copper	310
Lead	400
Mercury	10
Molybdenum	2
Nickel	160
Selenium	26

Zinc	2300
------	------

* The standards referenced are based on values for unrestricted use as surface soil in critical water resource areas with the exception of arsenic which is based on the default background remediation standard for Delaware.

5.8 Additional Management Conditions/Procedures

5.8.1 Material Rejection/Reprocessing

Due to the nature of the Gore® system process, it is very unlikely that the finished compost and/or soil blend materials will not meet standards and require re-processing. The continuous monitoring discussed above insures that the process operates as designed.

In the event that metals, fecal coliform and salmonella levels in the finished compost product exceed any of the criteria listed above, the Department shall be notified in writing within 24 hours of Peninsula's receipt of the data revealing the exceedance and the unacceptable compost shall be disposed of properly.

5.8.2 Equipment Failure/Breakdown

The only equipment onsite that could cause difficulties in the event of malfunction are the shredder, the blowers for air supply to the windrows and the screening equipment. In the event of mechanical malfunction of the shredder, the waste will be mixed and sized by front-end loader. If the air supply equipment malfunctions, there will be a window of time where no action will be necessary which will allow the repairs to be made, since the loss of air supply will not immediately impact the composting process. However, in the event of an extended malfunction the loaders on site can be used to turn the windrows if necessary. There are a sufficient number of loaders on site so that any individual failure/breakdown will not impact the overall operation. Screening equipment is utilized in two (2) separate phases of the composting process. Screens are initially used to size the cured, stabilize and composted material from Phase III to less than two inches before

the material is moved to Phase IV for secondary curing. The ½ inch screening equipment is used to screen the final product prior to sampling and distribution. As with the air supply equipment, there will be a window of time where no screening is necessary. This will allow repairs of the screening equipment to be undertaken prior to creating any process back-ups at the facility. Although it is unlikely, in the event of a protracted screen outage, delaying the screening required to process or market compost, a rental screen will be obtained to allow processing during the repair of the primary screening equipment.

5.8.3 Leachate Collection

Leachate will be generated from food and hatchery waste in the Receiving Building, from active composting windrows, and from drainage through the biofilter. Leachate will drain into the municipal sanitary sewer.

The Receiving Building has a drain to collect water from the floor of the Receiving Building. The floor of the building slopes to the drain. Water collected in this drain will be from the wash down of equipment and floors. This drain connects to the buried leachate piping system which drains to the sanitary sewer.

The facility has 54 windrows where the food waste is composted. Forty two of these windrows are covered with the Gore® cover system. The covers prevent rain fall from coming into contact with the composting material. Any rain which falls on the covers is directed to the storm drain system. The windrows slope at 2% along the length of the windrow to direct runoff to the storm drain system. Any water which comes out of the composting material is treated as leachate. This water is collected in the trench drain embedded in the concrete pad. The trench drains to a sump under each windrow. Each sump in turn drains to a leachate piping system which drains to the sanitary sewer. One of the properties of compost is its ability to retain water. As such, the amount of leachate generation is small. Experience at the Cedar Grove Compost facility is that the compost under each windrow generates approximately one gallon of leachate per day.

The 12 windrows in the primary curing phase are not covered. The material has been covered and composting for a minimum of 6 weeks prior to entering the curing phase. By the time the material has been moved to the curing phase, the requirements for PFRP and vector attraction reduction have been achieved. As such runoff from this material is no longer required to be treated as leachate.

Leachate will also be generated at the biofilter. This will be from rainfall which flows through the biofilter media material. Any water flowing through the media will be collected in the trench drain system cast into the concrete/asphalt base of the biofilter. This water will drain to the sanitary sewer.

6.0 FACILITY INSPECTION AND MAINTENANCE PROCEDURES

6.1 Routine Inspections of Tipping Building and Windrow Storage Areas

6.1.1 Daily Inspections

The company's Compost Facility General Manager will inspect Peninsula's compost operations, on a daily basis. This person will conduct a visual inspection of all related vehicles, equipment and site operations. It is also the responsibility of the Compost Facility General Manager to evaluate each situation as it arises during the operation of the Compost Facility. At the Compost Facility General Manager's discretion, he/she may determine that a situation is serious and requires the immediate shut down of these operations. In the case of a serious situation, the Compost Facility Operations Manager is required to immediately contact the Quality Control Manager. This individual will assist the Compost Facility General Manager in determining the nature of the incident at hand and recommend effective management techniques in order to rectify the situation. In the event of an emergency or dangerous situation, 911 should be contacted immediately.

On a daily basis, the Compost Facility Operations Manager will conduct a visual inspection of the Receiving Building and Compost Windrow Area for evidence of unintentional releases of non-hazardous wastes. In addition, all materials in the process of curing (i.e., Phase III and Phase IV Areas) will be monitored daily for temperature to ensure that the windrows are properly aerated and do not present a risk of fire or a potential source of odors at the site. Pursuant to Section II.H of the BUD, temperatures in excess of 160°F shall be reported to the Site Manager. During the inspection windrows and all site piles should be inspected for smoke. If smoke is detected, the Site Manager will be notified and correction actions will be taken. A Compost Facility Inspection Sheet will be completed each day (See Attachment VII). The Compost Facility Daily Inspection Sheet will serve to record the general condition of the facility and equipment, security measures, and other important safety concerns for the facility.

Should a vehicle, container or other equipment break down, Peninsula will provide for the transfer of the waste materials from the broken-down piece of equipment to a fully functioning piece of equipment, using the utter-most care to prevent the release or spillage of the waste materials.

6.1.2 Unsatisfactory Conditions

Any unsatisfactory conditions found during daily inspections should be identified and noted on the Daily Inspection forms. If conditions pose an immediate threat to the facility, cause safety concerns or affect the environment in any way, the Compost Facility Operations Manager must take immediate correction actions. Should the conditions be of such a nature as to cause an immediate threat to personnel, health and safety or the environment, the Compost Facility Operations Manager must temporarily suspend operations if necessary to immediately begin corrective actions. In the event of a reportable release or other severe incident, outside agencies will be notified and outside assistance may be required.

If any conditions found during the daily inspection or at anytime are in violation of the Beneficial Use Determination conditions, the Department's Solid and Hazardous Management Section (SHWMS) shall be notified immediately following implementation of corrective measures and actions required to maintain safety at the site.

6.2 Inspection and Monitoring Of Biofilter Odor Controls

The biofilter must be inspected on a regular basis to insure it is functioning properly. Its inherent simplicity can tempt operators to neglect biofilters. Critical control parameters include back pressure, moisture content, air flow, temperature and pH. A thorough maintenance program should include all operating components of the biofilter system including fans (belts/sheaves/bearings), surface media management, weed control and organic media replacement.

6.2.1 Use of PID Meter For Breakthrough And Air Permit Limits

Although the operator's nose may be the first to detect problems in biofilter performance, the use of instrumentation and adherence to any air permit levels should be prioritized.

6.2.2 System Recharge/Change Out Procedures

Proper maintenance of the biofilter may include "fluffing" of the media periodically to avoid potential compaction and degradation over time. Life expectancy of the organic media may be less than five years. Change out procedures should carefully follow initial installation procedures to avoid damage to the filter's infrastructure.

6.3 Stormwater Basin Area Maintenance and Inspections

The stormwater basins must be properly maintained so that they function as designed and that all effluent meets the criteria established in the DNREC discharge permit. The retention basins shall be inspected on a weekly basis. Inspections shall be documented on the facility's Daily

Operating Log. They should also be inspected prior to the on-set of any severe inclement weather such as tropical storms or hurricanes (to insure that inlet and outlet structures are free from obstructions).

7.0 FACILITY PERSONNEL AND TRAINING REQUIREMENTS

7.1 Employee Responsibilities and Qualifications

Table 3 is a summary of the Peninsula Staffing Plan. The Staffing Plan may be modified based on operational experience and other factors. A Staffing Plan that includes job descriptions is included in this document as “Attachment IV-Staffing Plan”. Job descriptions are used to define the responsibilities, qualification and knowledge required for the successful operation of the compost facility. This information can be used to recruit, train and place new personnel. A job description is used to establish each worker’s responsibilities at the facility and profiles the experience necessary for each position.

Table 3 – Staffing Plan	
Job Position	Number of Employees
Compost Facility Operations Manager (CFOM)	1
Process Control Supervisor/QA Supervisor	1
Scalehouse/Dispatcher/Scheduler	1
Equipment Operator	4
Equipment Mechanic	1
Operations Staff Members	4

The staffing levels shown in the chart are considered sufficient to insure that the facility is run efficiently and in a safe, coordinated, and compliant manner. At least one (1) staff member will be assigned to remove prohibited waste at Riverside Storage Yard, located at 601 Christiana Avenue and the yard waste pile at the 612 Christiana Avenue property. The remaining operations staff members will typically operate equipment or other tasks as directed by the CFOM.

7.2 Facility Training Program

All site personnel will have job specific training provided by Peninsula. In addition to job specific training, employees may be required to receive additional supplemental training. Peninsula is committed to providing a comprehensive range of relevant training programs. A training matrix has been included in this Plan as “Attachment V – Facility Training Program”.

8.0 CONTINGENCY PLAN AND EMERGENCY RESPONSE PROCEDURES

On a day-to-day basis, personnel should always be on alert for potential emergency situations that would impact not only themselves, but other employees as well. A complete Contingency Plan and Emergency Response Procedures are included in this Plan as “Attachment VI – Contingency Plan and Emergency Response Procedures”.

9.0 RECORDKEEPING PROCEDURES

9.1 Inspection Documents

Periodic facility inspections are documented immediately after the inspection is completed. A typical Facility Inspection Form is provided in Attachment VII.

9.2 Operating Records

Operating records from the Gore® system process are maintained in the Peninsula Compost office. Attachment VII contains information on the Gore® Control System and typical reports generated by the system operating software.

9.3 Analytical Testing Results

Analytical results as required by Section 5.7.2 of this document and Section II.N of the Beneficial Use Determination will be kept on site for up to three (3) years and made available for Department's review.

9.4 Personnel Training

All personnel training records documenting required training as outlined in Attachment V, the Facility Training Program. All records must be maintained onsite for a period of three (3) years and made available to the Department upon request as per Section II.M of the BUD.

9.5 Incident Reports

Incidents requiring emergency response are documented immediately after the incident. Copies of the Incident Report Form are maintained in the Peninsula Compost offices. A typical Incident Report Form is provided in Attachment VII.

9.6 Periodic Reports to DNREC

9.6.1 Quarterly Reports

Quarterly reports will be submitted in electronic format. The first quarterly report will be due 15 days after the end of the calendar quarter (i.e. April, July, October, January). Quarterly reports shall include tonnage and volumes for the following information:

- Yard waste, wood waste, food waste, hatchery waste, animal bedding, and any other incoming waste received, listed by waste type;

- Yard waste, wood waste, screened-overs, food waste, hatchery waste, animal bedding, and any other waste stored, listed by waste type and storage location;
- Finished compost produced;
- Finished compost shipped to, or picked up by, customers;
- Finished compost used at or around the facility;
- Finished compost stored;
- Material in each of Phases I-IV, listed by phase;
- All waste sent for disposal, recycling, or reuse, and the date and facility where sent. An attempt to provide a general description of the waste shall also be provided, i.e. plastic, treated lumber;
- Compost failing to meeting performance and analytical criteria in Table 1, including the parameter(s) that was not met and the facility at which the unacceptable compost, and manufactured soil if applicable, was disposed; and
- Rejected waste, tallied as number of loads, including reason for rejection, customer, and date it was brought to Peninsula.
- The quarterly reports shall be sent to:

Department of Natural Resources and Environmental Control
 Division of Waste and Hazardous Substances
 Solid and Hazardous Waste Management Section
 89 Kings Highway
 Dover, DE 19901

9.6.2 Annual Reports

Annual Reports will be submitted in hard copy (paper) format. The annual report will consist of the four quarterly reports plus a summary page. Annual reports will be due no later than February 1st of each year. The annual report

shall include the following and be submitted to the same address as the quarterly report above.be sent to the following address:

- Tonnages and volumes of material in the quarterly reports totaled for the year;
- Names and locations of customers that supplied food waste or hatchery waste;
- A summary of the performance and analytical results from the quarterly finished compost testing reports, to include the range of results for each parameter and Peninsula's interpretation of those results; and
- Written discussion by Peninsula of the facility's operations and processes to include any adjustments made in the process as well as a summary of materials management knowledge and experience gained during the past calendar year.

N:\#0240 - Peninsula Compost Company\Operations Plan\Comments to August 2013 Rev Operations Plan\Operations Plan July 2014 response to DNREC review comments - 7-17-14 changes accepted.doc